

SWITCH LEVEL RELIABLE TRANSMISSION

ABSTRACT OF THE DISCLOSURE

A microchip configured to reliably transmit data is provided. The microchip
5 includes a memory region and a selection module configured to select a portion of the
data from the memory region. An error checking module configured to calculate a value
derived from the selected portion of the data is provided. A pointer region including a
plurality of object pointers is included. One of the object pointers is associated with an
address of the portion of the data. The object pointer associated with the address is
10 configured to receive a signal indicating an error associated with the transmission of the
data. A scheduler module in communication with each of the plurality of object pointers
is provided. The scheduler module is configured to schedule re-transmission of the
selected portion of the data. A system and a method for reliably transmitting data
between microchips are also provided.

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